

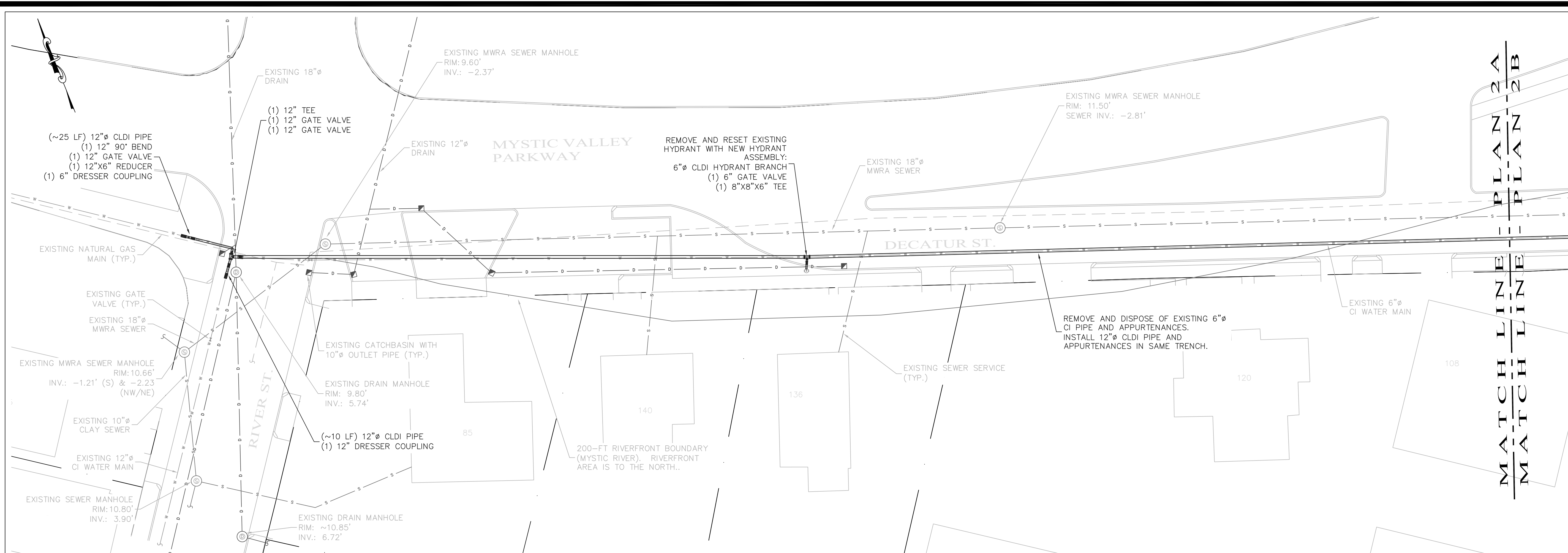


TOWN OF ARLINGTON

BID #22-38 2021/2022 WATER DISTRIBUTION SYSTEM IMPROVEMENTS - VARIOUS LOCATIONS AUGUST 2022

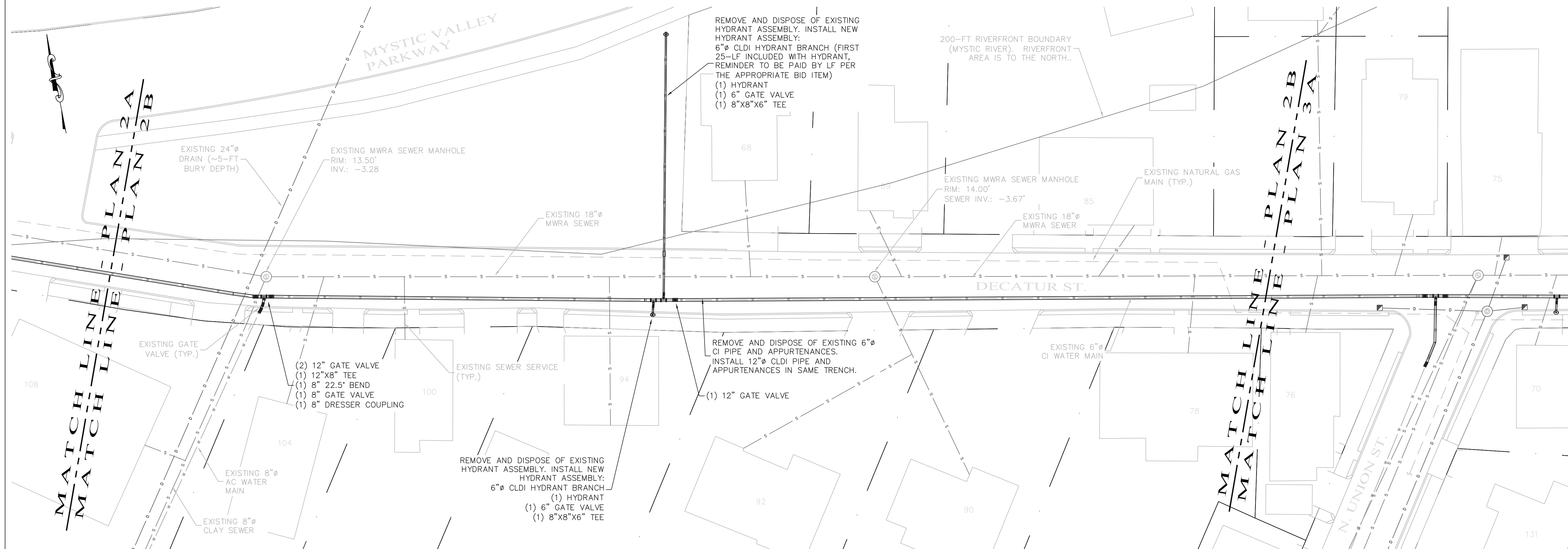
PLAN LIST:

**COVER - SHEET 1
DECATUR STREET - SHEETS 2-3
BROADWAY - SHEETS 4-5
GARDNER STREET - SHEET 6
SILK STREET - SHEET 7
GRAY STREET PRV - SHEET 8
HILTON STREET - SHEET 9 (BID ALTERNATE #1)
HUTCHINSON ROAD PRV - SHEET 10 (BID ALTERNATE #2)
GENERAL NOTES AND TYPICAL CONSTRUCTION DETAILS: SHEET 11**



PLAN 2A - DECATUR STREET

SCALE: 1"=20'



PLAN 2B - DECATUR STREET

SCALE: 1"=20'

NOTES

- Existing water main pipe between 104 and 108 Decatur Street is asbestos cement (AC). Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
- Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
- Bury depth of water main is expected to be approximately six (6) feet.
- No fueling of equipment shall be allowed within the 200-FT Riverfront Resource Area Boundaries.
- Sidewalks on the sections of Decatur Street shown on this plan are predominantly constructed of concrete with granite curbing. Sidewalks shall be replaced in kind wherever disturbed.
- The sewer main in Decatur Street is owned by the MWRA. The Town will procure an 8M Permit for this work. The Contractor will be responsible for adhering to all requirements of the MWRA 8M Permit.
- Portions of the work on Decatur Street will take place in the Mystic Valley Parkway right of way, which is under the authority of the Massachusetts Department of Conservation and Recreation (DCR). The Town will procure a DCR Construction Access Permit as applicable. It is expected that work hours on Mystic Valley Parkway will be limited from 9 AM to 3 PM unless otherwise approved by the DCR. Contractor will be responsible for coordinating Massachusetts State Police Details as applicable. The Town will pay the costs for any details directly.
- Work hours on River Street will be limited from 9 AM to 3 PM unless otherwise approved by the Engineering Division and/or the Arlington Police Department.
- The water main to be replaced on Decatur Street is under a series of curb bumpouts/landscaped areas in front of 85 River Street and 140 Decatur Street. Contractor must provide tree protection and maintain landscaped area to the extent possible. Plantings shall be removed during construction and replanted at completion.

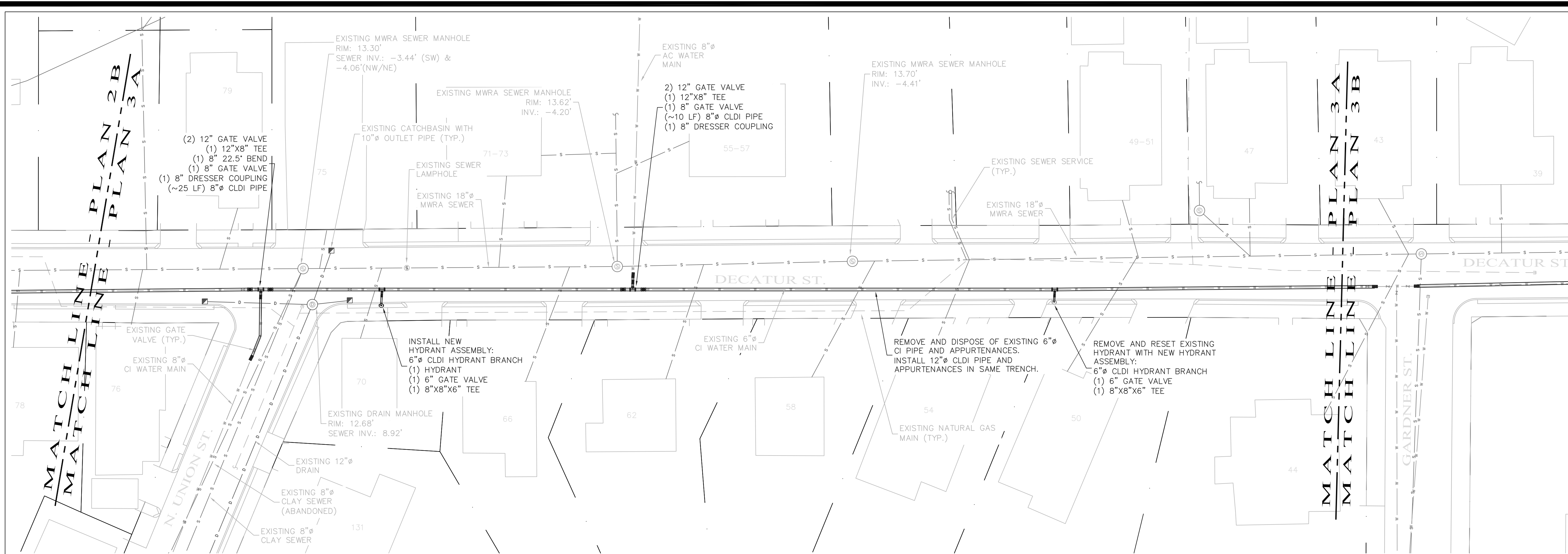
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Town of
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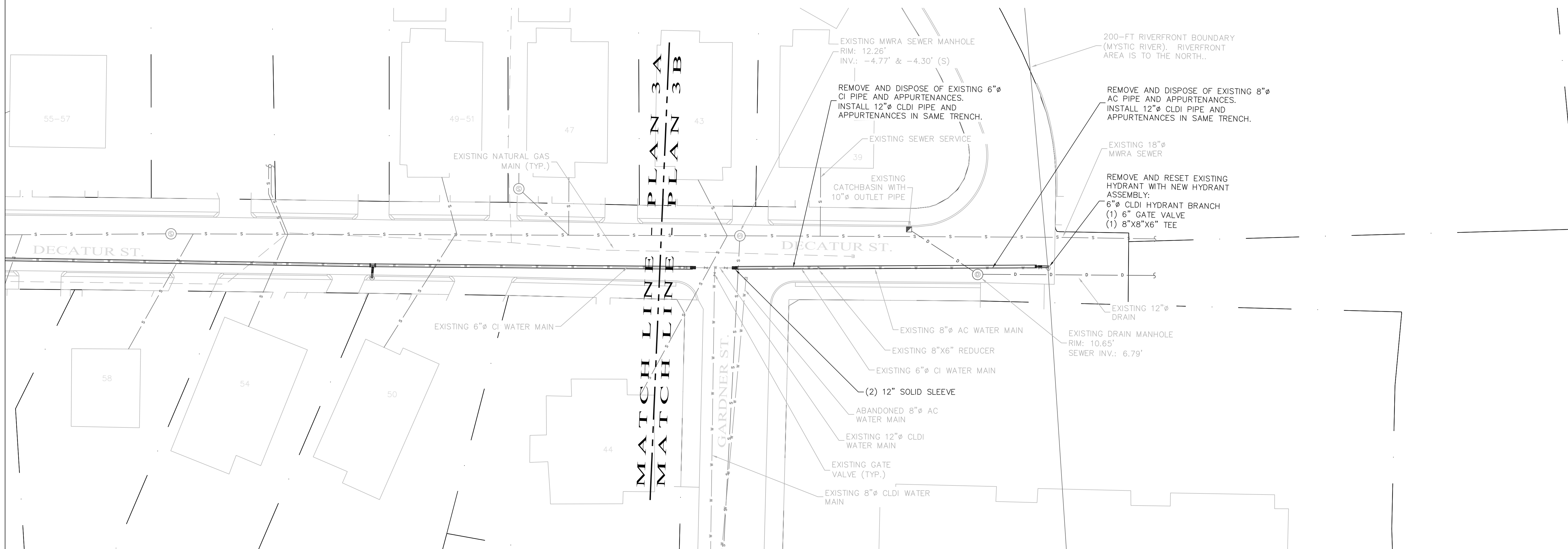
**2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS**

DECATUR STREET

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|-----------|-------------|--------|---------|
| Project: | BID #22-38 | Sheet: | 2 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 3A - DECATUR STREET
SCALE: 1"=20'



PLAN 3B - DECATUR STREET
SCALE: 1"=20'

NOTES

1. A portions of the existing water main pipe on Decatur Street east of Gardner Street is asbestos cement (AC). Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
2. Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
3. Polyethylene encasement (polywrap) shall be provided for all CLDI pipe installed from the Gardner Street intersection east to the project limits.
4. Bury depth of water main is expected to be approximately six (6) feet.
5. No fueling of equipment shall be allowed within the 200-FT Riverfront Resource Area Boundaries.
6. Sidewalks on the sections of Decatur Street shown on this plan are predominantly constructed of asphalt with granite curbing. Sidewalks shall be replaced in kind wherever disturbed.
7. The sewer main in Decatur Street is owned by the MWRA. The Town will procure an 8M Permit for this work. The Contractor will be responsible for adhering to all requirements of the MWRA 8M Permit.
8. Portions of the work on Decatur Street will take place in the Mystic Valley Parkway right of way, which is under the authority of the Massachusetts Department of Conservation and Recreation (DCR). The Town will procure a DCR Construction Access Permit as applicable. It is expected that work hours on Mystic Valley Parkway will be limited from 9 AM to 3 PM unless otherwise approved by the DCR. Contractor will be responsible for coordinating Massachusetts State Police Details as applicable. The Town will pay the costs for any details directly.

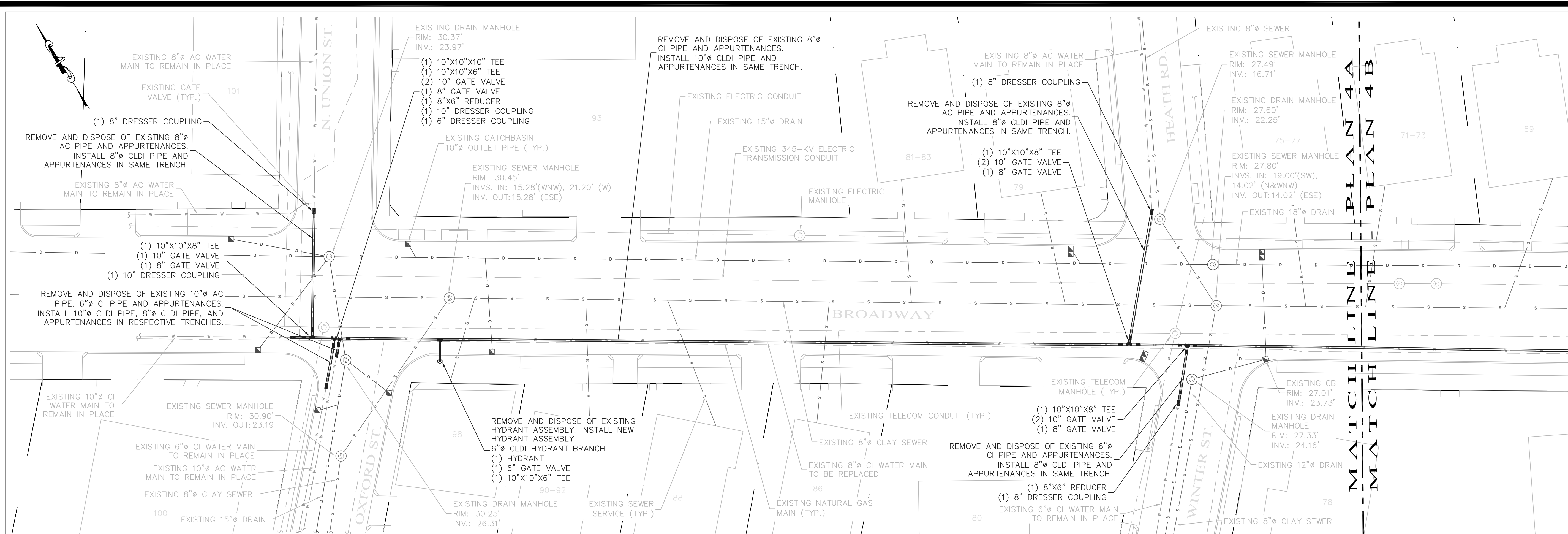
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**2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS**

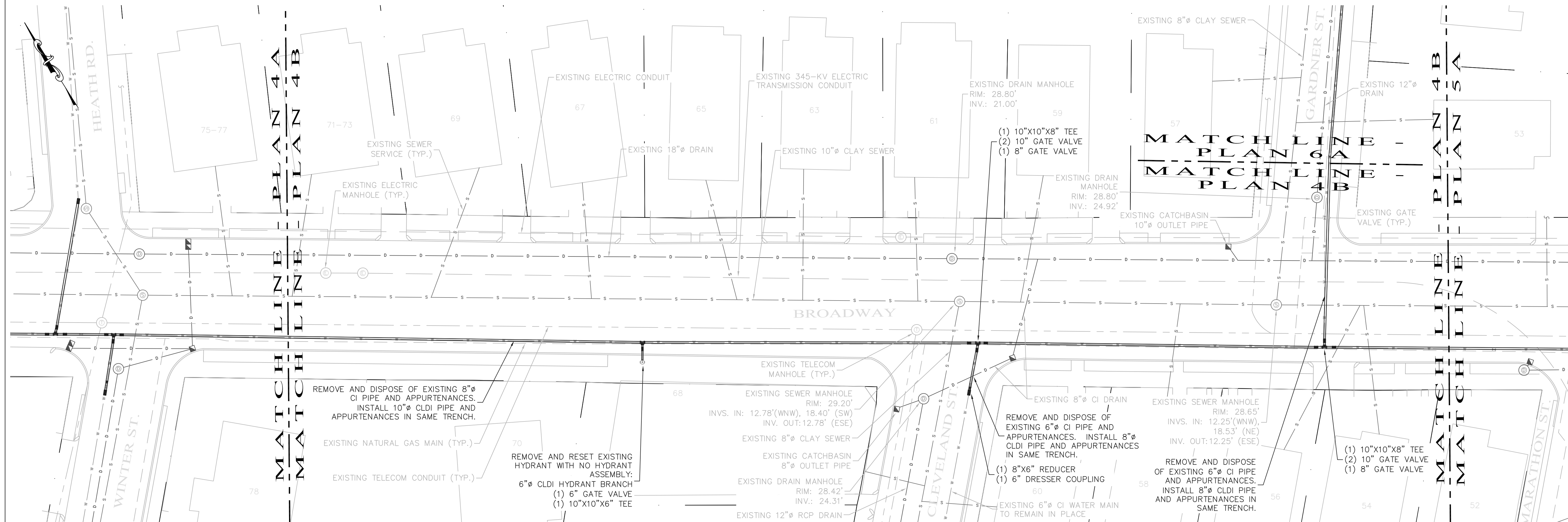
DECATUR STREET

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|-----------|-------------|--------|---------|
| Project: | BID #22-38 | Sheet: | 3 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 4A - BROADWAY

SCALE: 1"=20'



PLAN 4B - BROADWAY

SCALE: 1"=20'

NOTES

- Broadway has a concrete base below the asphalt. Contractor shall assume they may encounter approximately one (1) foot deep concrete in all trench work on Broadway.
- Broadway has two sets of buried trolley tracks in the middle of the roadway. Contractor shall assume cutting trolley tracks shall be required to complete the work on Broadway.
- Broadway has a buried 345-KV electrical transmission conduit through most of the project area as shown on the plan. Bury depth to top of the conduit varies from approximately 3-feet to 6-feet. Particular care will be required for all conduit crossings.
- Asbestos cement (AC) pipe is present in the project area as shown on the plan. Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
- Existing water main and natural gas main are located within the same trench in a majority of the project area as shown on the plan.
- Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
- Polyethylene encasement (polywrap) shall be provided for all CLDI pipe installed from the Gardner Street intersection east to the project limits.
- Bury depth of water main is expected to be approximately five (5) feet.
- Sidewalks on Broadway on this plan are predominantly constructed of concrete with granite curbing. Sidewalks shall be replaced in kind wherever disturbed.
- Work hours on Broadway will be limited from 9 AM to 3 PM unless otherwise approved by the Engineering Division and/or the Arlington Police Department.

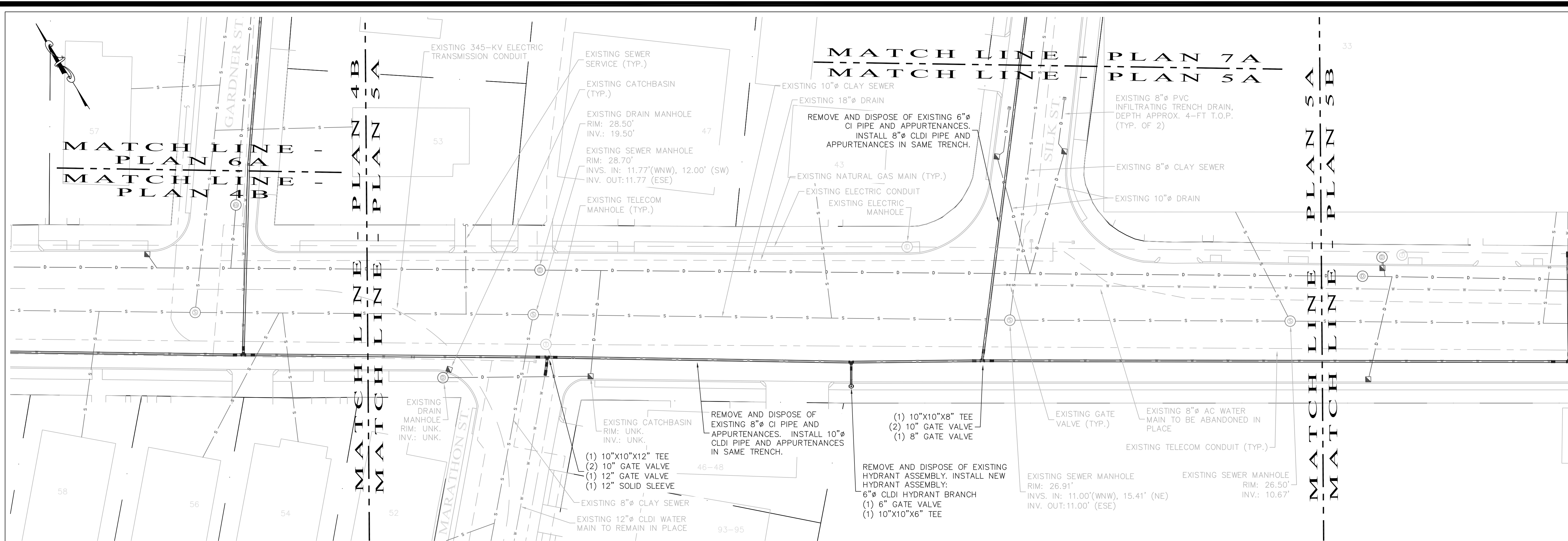
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Town of
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2021/2022 WATER DISTRIBUTION SYSTEM IMPROVEMENTS

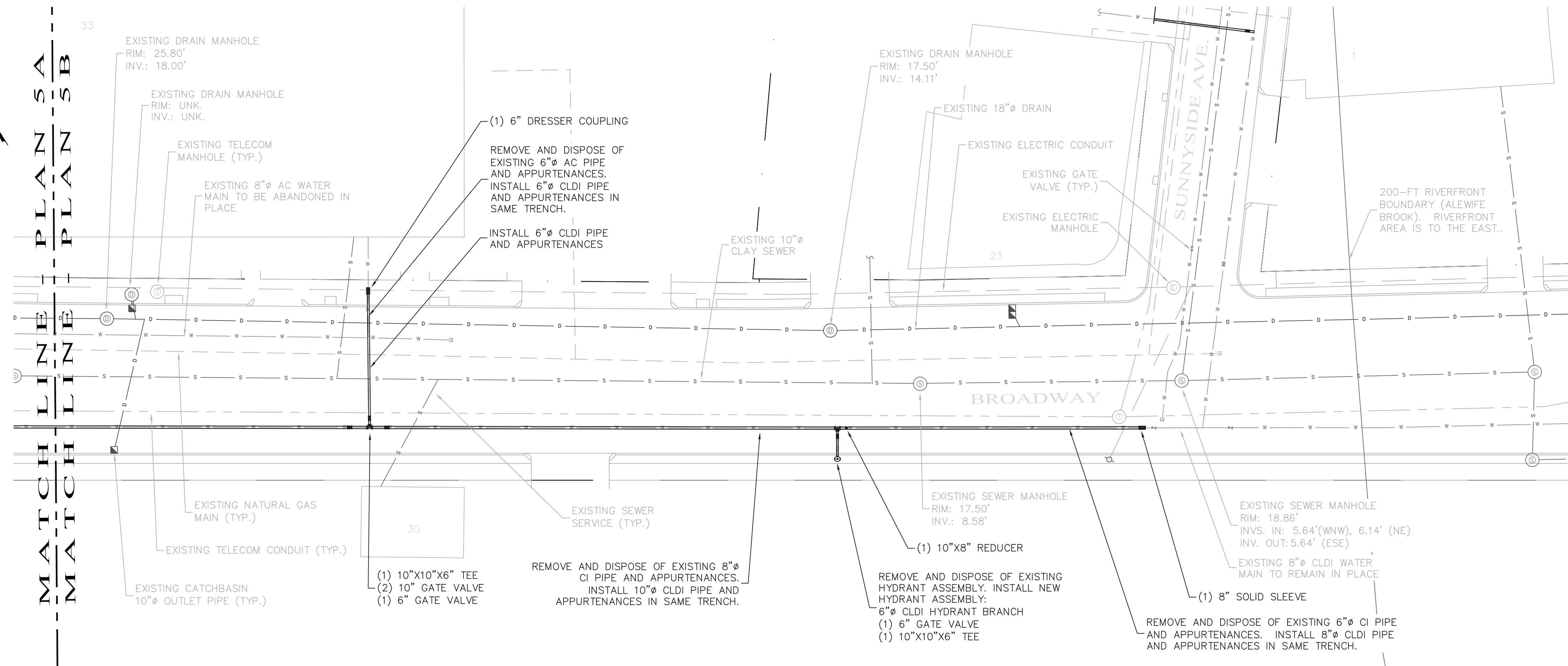
BROADWAY

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|-----------|-------------|--------|---------|
| Project: | BID #22-38 | Sheet: | 4 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 5A - BROADWAY

SCALE: 1"=20'



PLAN 5B - BROADWAY

SCALE: 1"=20'

NOTES

- Broadway has a concrete base below the asphalt. Contractor shall assume they may encounter approximately one (1) foot deep concrete in all trench work on Broadway.
- Broadway has two sets of buried trolley tracks in the middle of the roadway. Contractor shall assume cutting trolley tracks shall be required to complete the work on Broadway.
- Broadway has a buried 345-KV electrical transmission conduit through most of the project area as shown on the plan. Bury depth to top of the conduit varies from approximately 3-feet to 6-feet. Particular care will be required for all conduit crossings.
- Asbestos cement (AC) pipe is present in the project area as shown on the plan. Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
- Existing water main and natural gas main are located within the same trench in a majority of the project area as shown on the plan.
- Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
- Polyethylene encasement (polywrap) shall be provided for all CLDI pipe installed from the Gardner Street intersection east to the project limits.
- Bury depth of water main is expected to be approximately five (5) feet.
- Sidewalks on Broadway on this plan are predominantly constructed of concrete with granite curbing. Sidewalks shall be replaced in kind wherever disturbed.
- Work hours on Broadway will be limited from 9 AM to 3 PM unless otherwise approved by the Engineering Division and/or the Arlington Police Department.

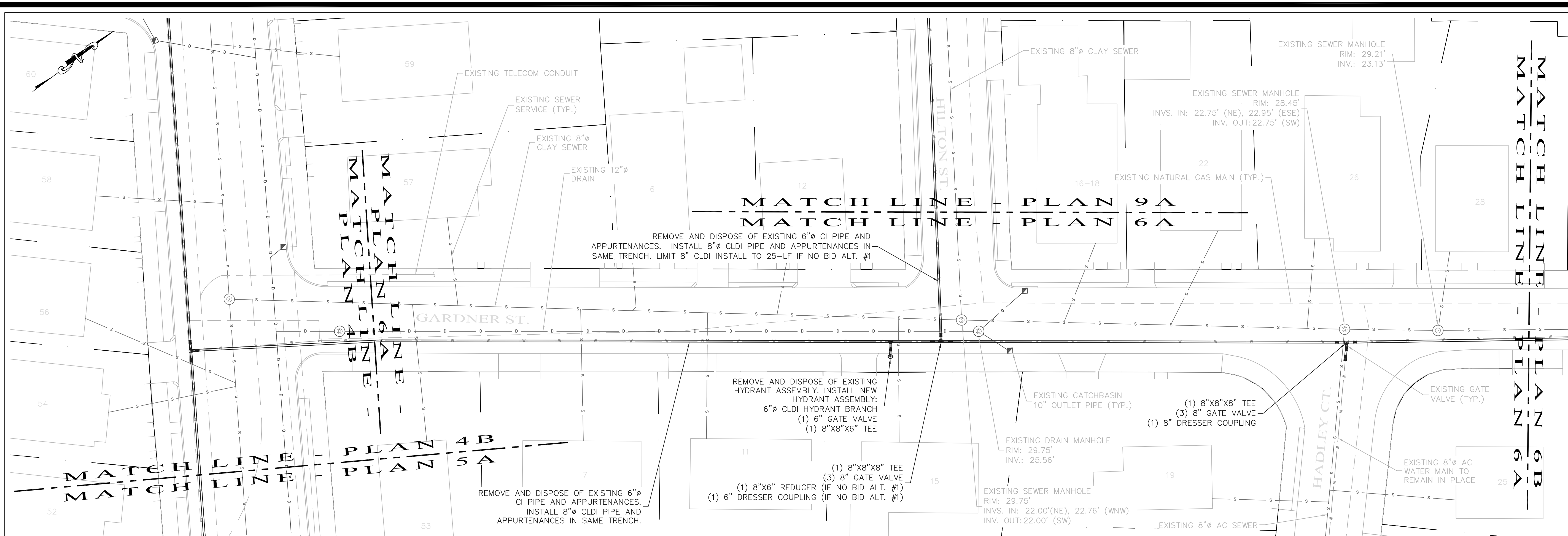
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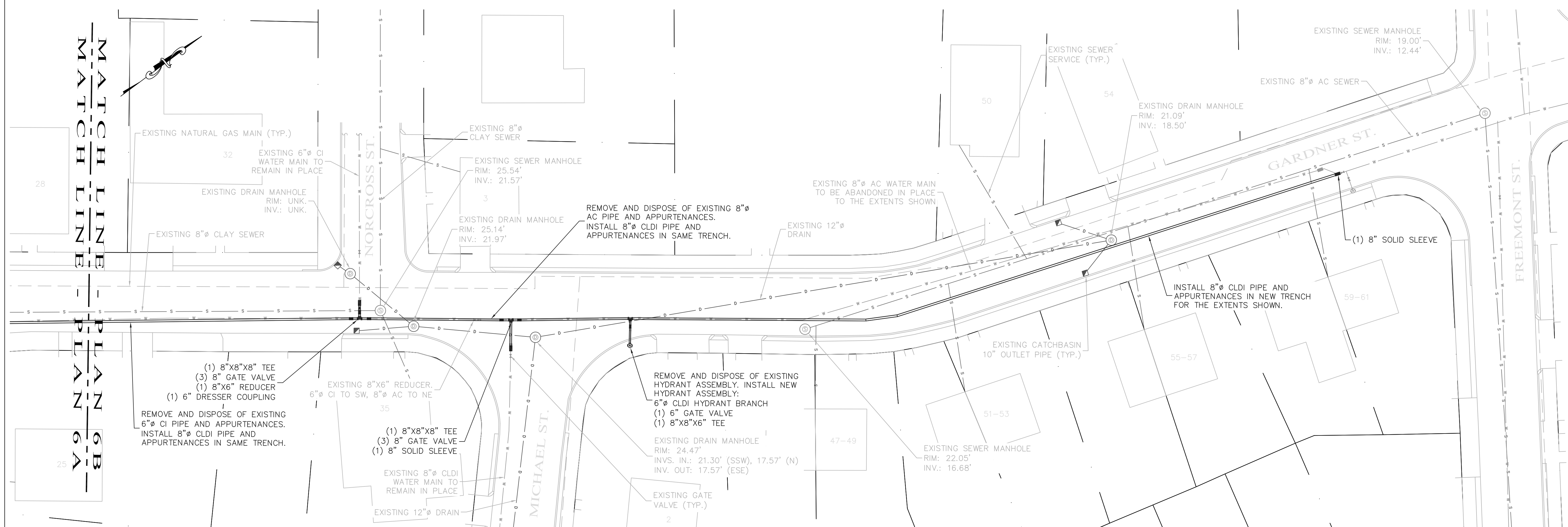
2021/2022 WATER DISTRIBUTION SYSTEM IMPROVEMENTS

BROADWAY

| | | | |
|-----------|-------------|--------|---------|
| Project: | BID #22-38 | Sheet: | 5 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 6A - GARDNER STREET
SCALE: 1"=20'



PLAN 6B - GARDNER STREET
SCALE: 1"=20'

NOTES

1. Asbestos cement (AC) pipe is present in the project area as shown on the plan. Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
2. Segments of existing water main, sewer main, and drain in Gardner Street and intersecting streets are located within the same trench.
3. Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
4. Polyethylene encasement (polywrap) shall be provided for all CLDI pipe installed on Gardner Street.
5. Bury depth of water main is expected to be approximately five (5) feet.
6. Sidewalks on Gardner Street, where existing, are predominantly concrete with granite curbing from Broadway to Norcross Street and asphalt with granite curbing from Norcross Street to Fremont Street. Sidewalks shall be replaced in kind wherever disturbed.

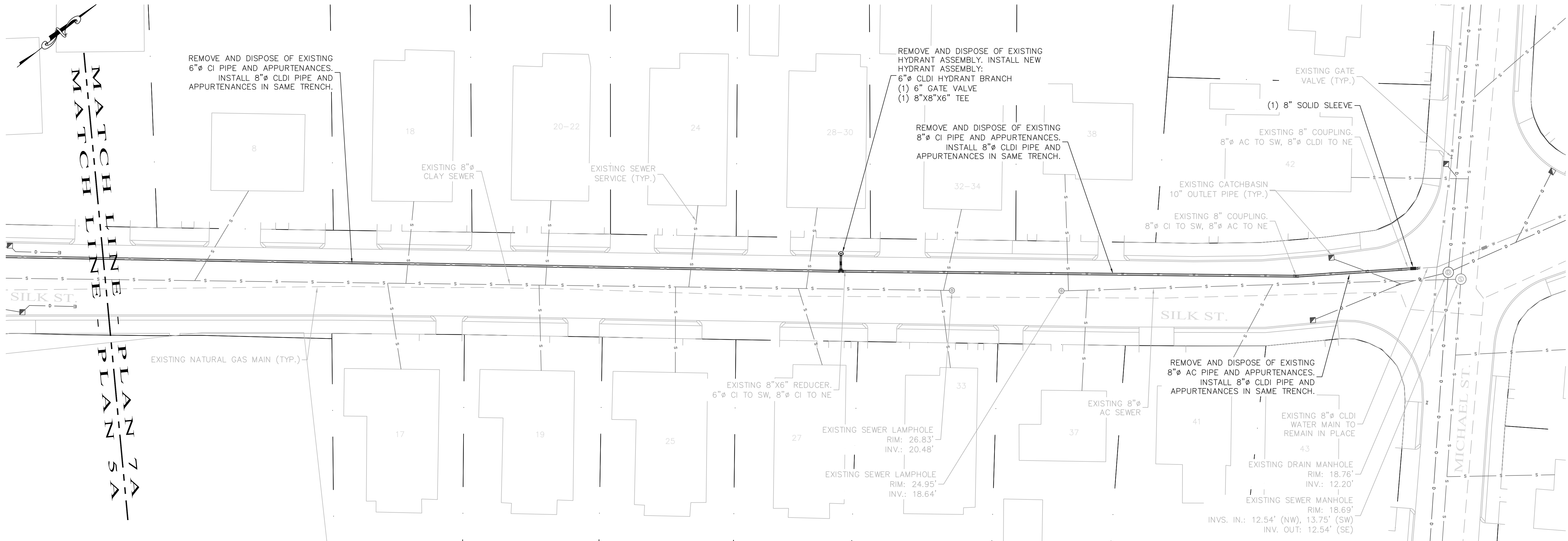
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Town of
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**2021/2022 WATER
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GARDNER STREET

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|-----------|-------------|--------|---------|
| Project: | BID #22-38 | Sheet: | 6 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 7A - SILK STREET
SCALE: 1"=20'

NOTES

- Asbestos cement (AC) pipe is present in the project area as shown on the plan. Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
- Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
- Polyethylene encasement (polywrap) shall be provided for all CLDI pipe installed on Silk Street.
- Bury depth of water main is expected to be approximately six (5) feet.
- Sidewalks on this section of Silk Street, are predominantly constructed of concrete with granite curb on the western side of the street and predominantly constructed of asphalt with granite curbing on the eastern side of the street. Sidewalks shall be replaced in kind wherever disturbed.

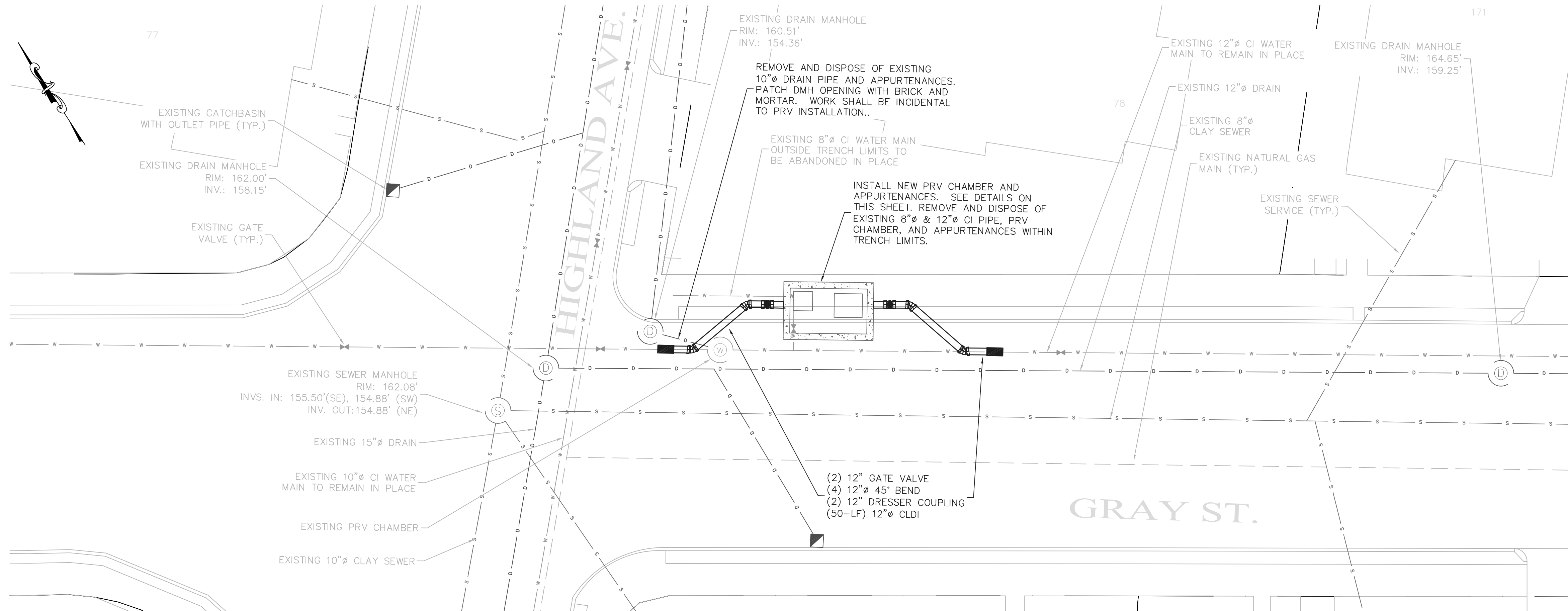
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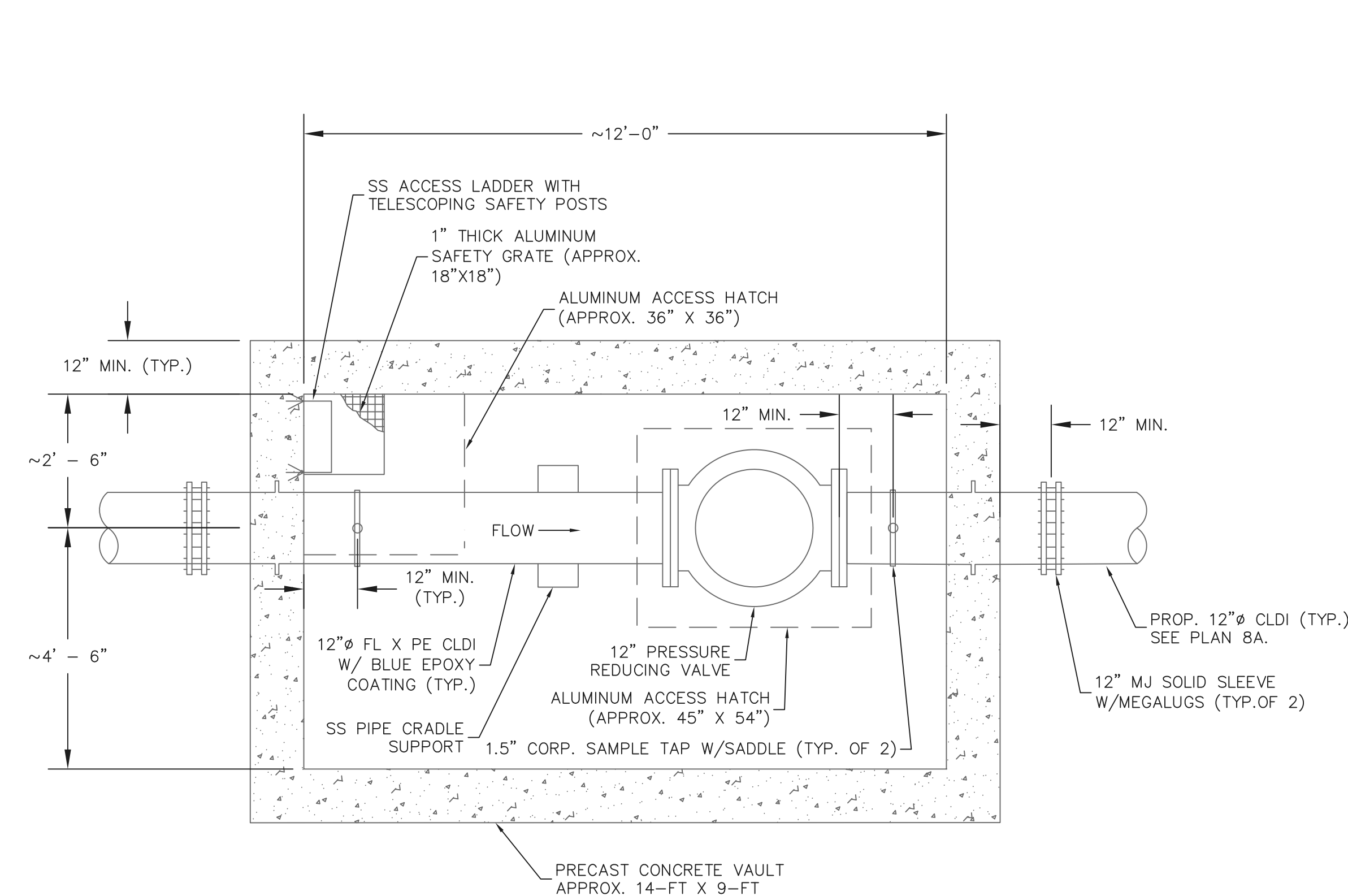
2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS

SILK STREET

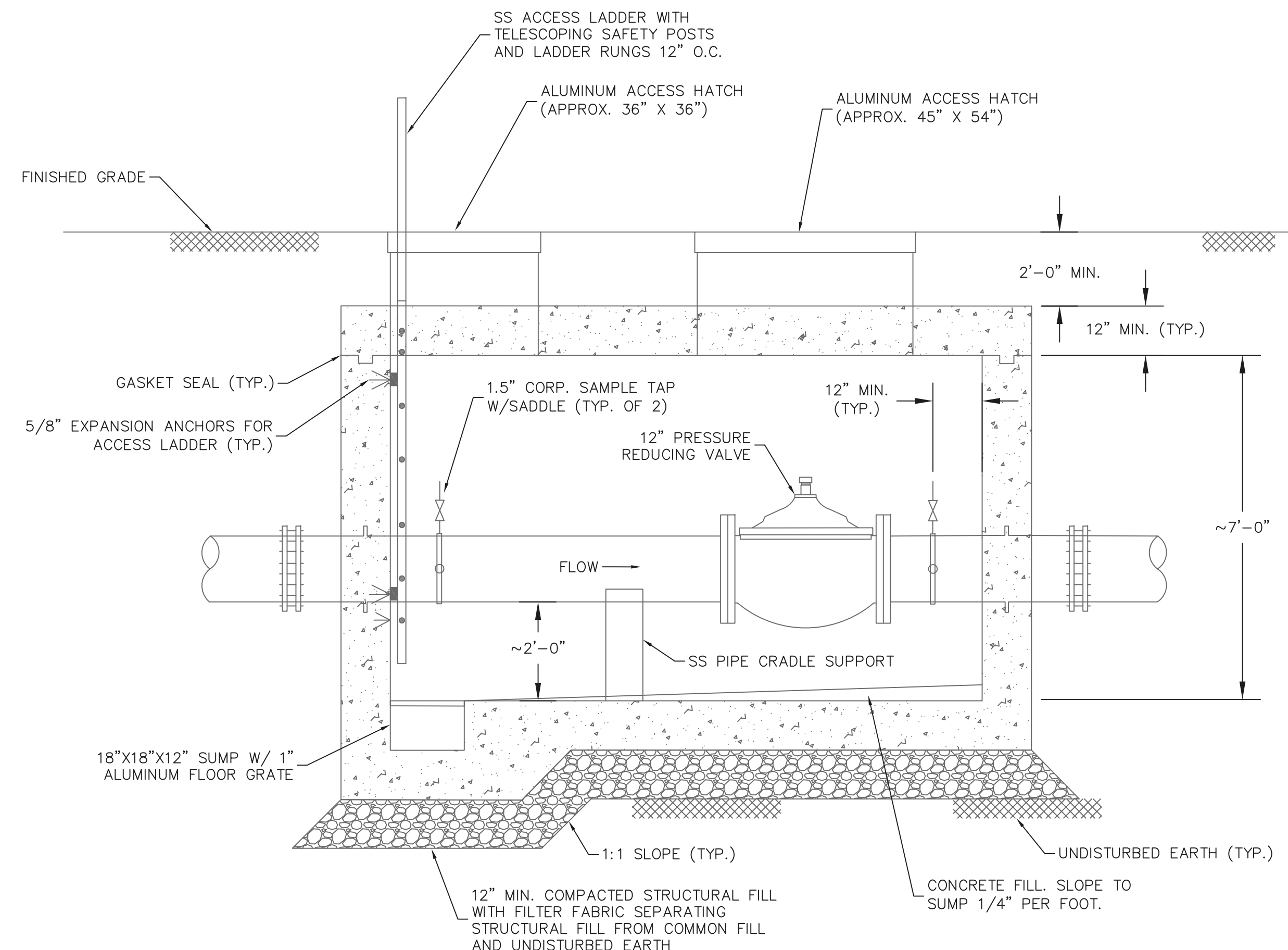
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| Project: | BID #22-38 | Sheet: | 7 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 8A - GRAY STREET PRV
SCALE: 1"=10'



PRV DETAIL - PLAN VIEW
SCALE: N.T.S.



PRV DETAIL - PROFILE VIEW
SCALE: N.T.S.

NOTES

- Furnishing and installing new PRV shall be paid as a lump sum under the appropriate bid item and shall include all equipment and appurtenances shown in the Plan and Profile Details on this sheet, as well as all items listed in the contract specifications whether shown in the drawings or not. Unless otherwise noted on Plan 8A, all other site work shall be paid under the applicable site work Bid Items (i.e. 12" CLDI, 12" Gate Valves, etc.).
- Depth of excavation for the PRV vault installation is expected to be 13-ft or greater. Design and installation of trench shoring for removal of trench rock shall be incidental to the PRV installation.
- It is anticipated that trench rock will be encountered in the excavation area. Removal and disposal of trench rock shall be paid under the applicable bid item for trench rock and will not be considered incidental to the installation of the new PRV.
- Control density fill shall be utilized during backfill operations to ensure there are no voids around the new PRV during backfill operations.
- Trench limits for installation of the new PRV and associated CLDI water main pipe shall include all area between the connections to the existing CI water main pipe on both sides of the proposed work.
- Segments of existing water main and drain on Gray Street are located within the same trench.
- Bury depth of water main is expected to be approximately six (6) feet.
- The sidewalk to be disturbed on Gray Street for the installation of the new PRV is constructed of concrete with granite curbing. Sidewalk panels and granite curbing disturbed on Gray Street shall be replaced/restored in kind.

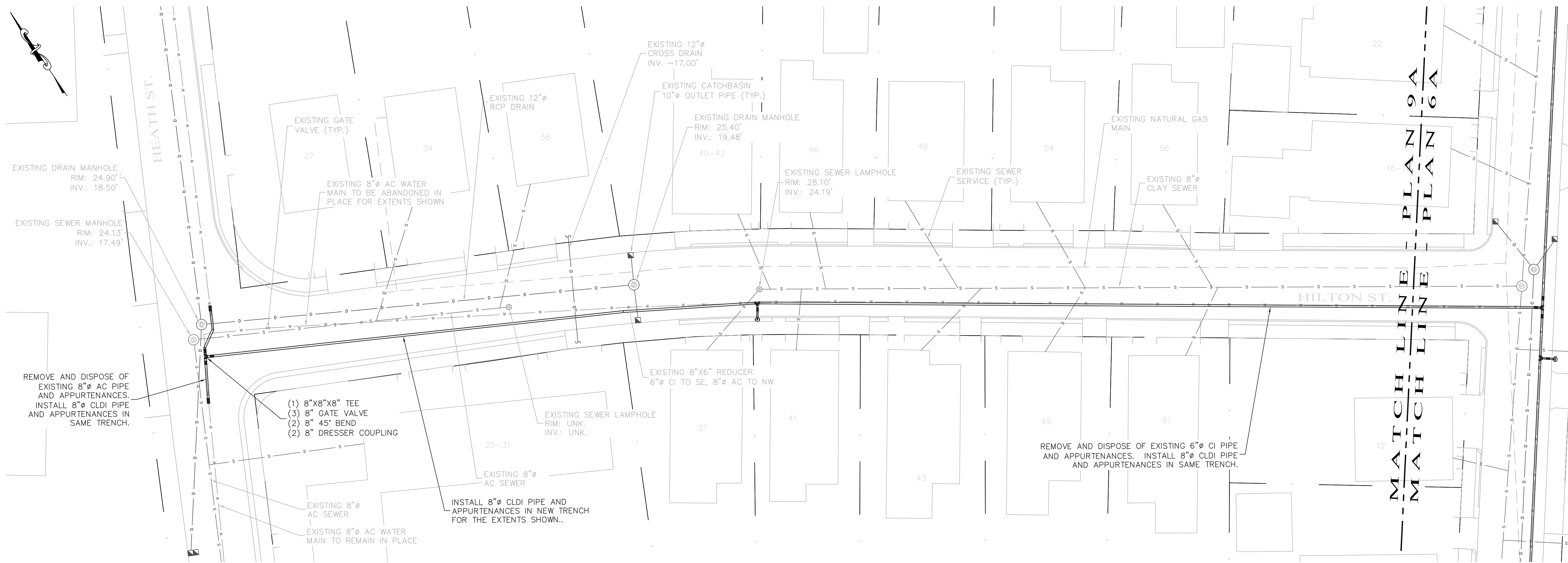
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Town of
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**2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS**

GRAY STREET PRV

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| Project: | BID #22-38 | Sheet: |
| Drawn By: | WCC | 8 of 11 |
| Scale: | AS NOTED | |
| Date: | AUGUST 2022 | |



PLAN 9A - HILTON STREET (BID ALTERNATE #1)
SCALE: 1"=20'

NOTES

- Asbestos cement (AC) pipe is present in the project area as shown on the plan. Contractor shall expect to handle, remove, and dispose of AC pipe exposed in trenches and as otherwise called out in the plan. Contractor shall have all necessary licensure for handling AC asbestos containing materials.
- Segments of existing water main, sewer main, and drain in Hilton Street and Heath Street are located within the same trench.
- Contractor shall assume water, sewer, and natural gas (where applicable) services are located in the same trench for all buildings.
- Bury depth of water main is expected to be approximately six (6) feet.
- Sidewalks on Hilton Street and Heath Street are predominantly asphalt with asphalt berm. Sidewalks shall be replaced in kind wherever disturbed.

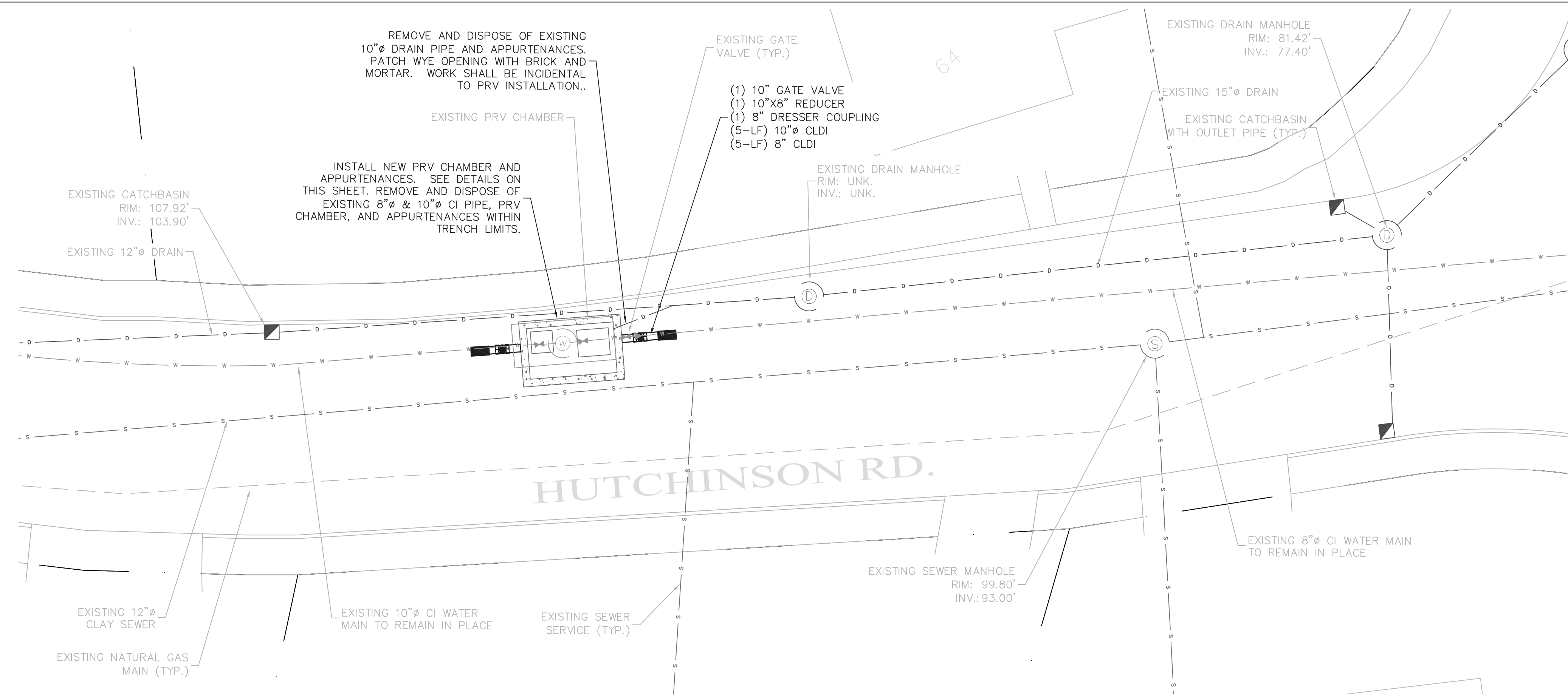
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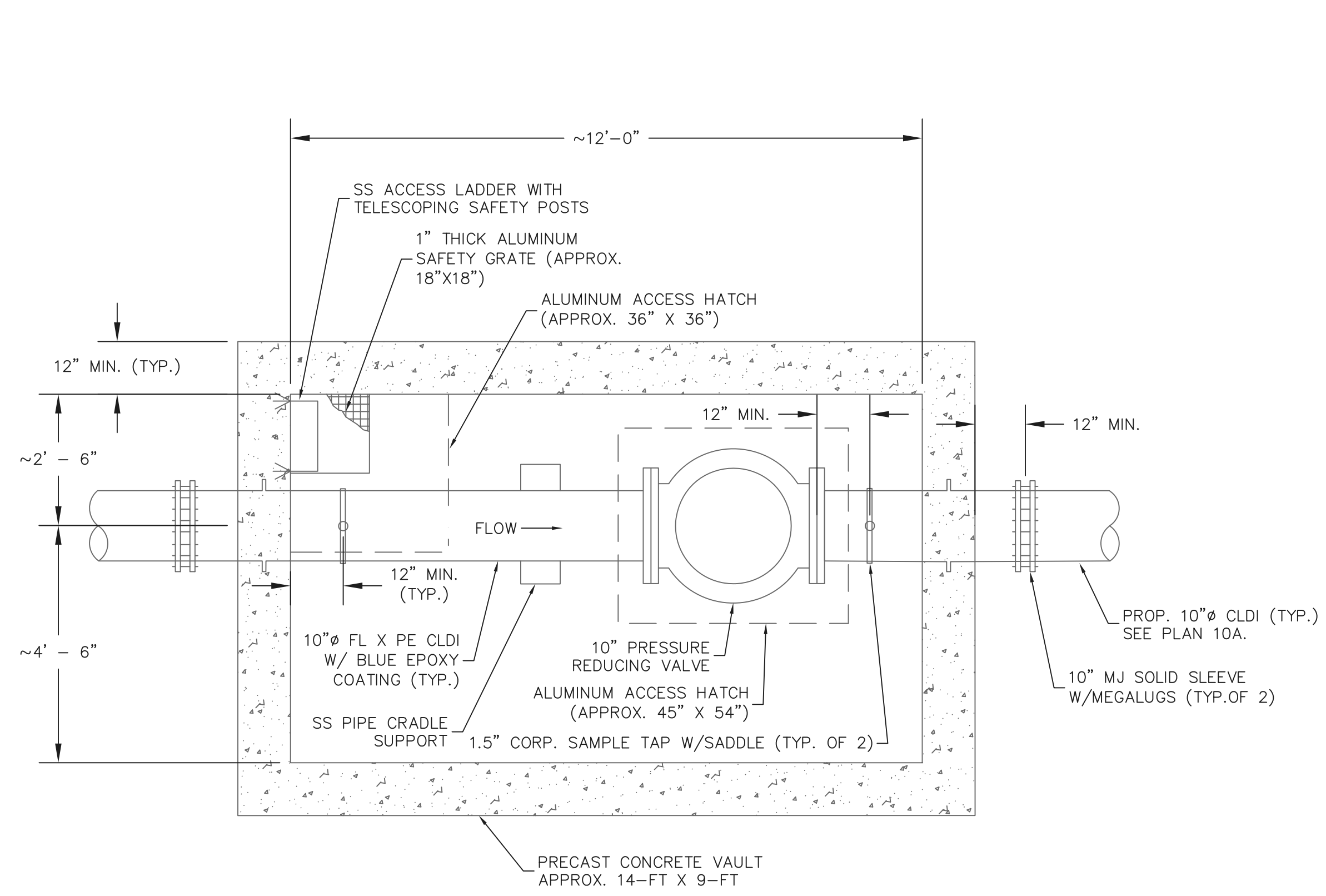
**2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS**

**HILTON STREET
(BID ALTERNATIVE #1)**

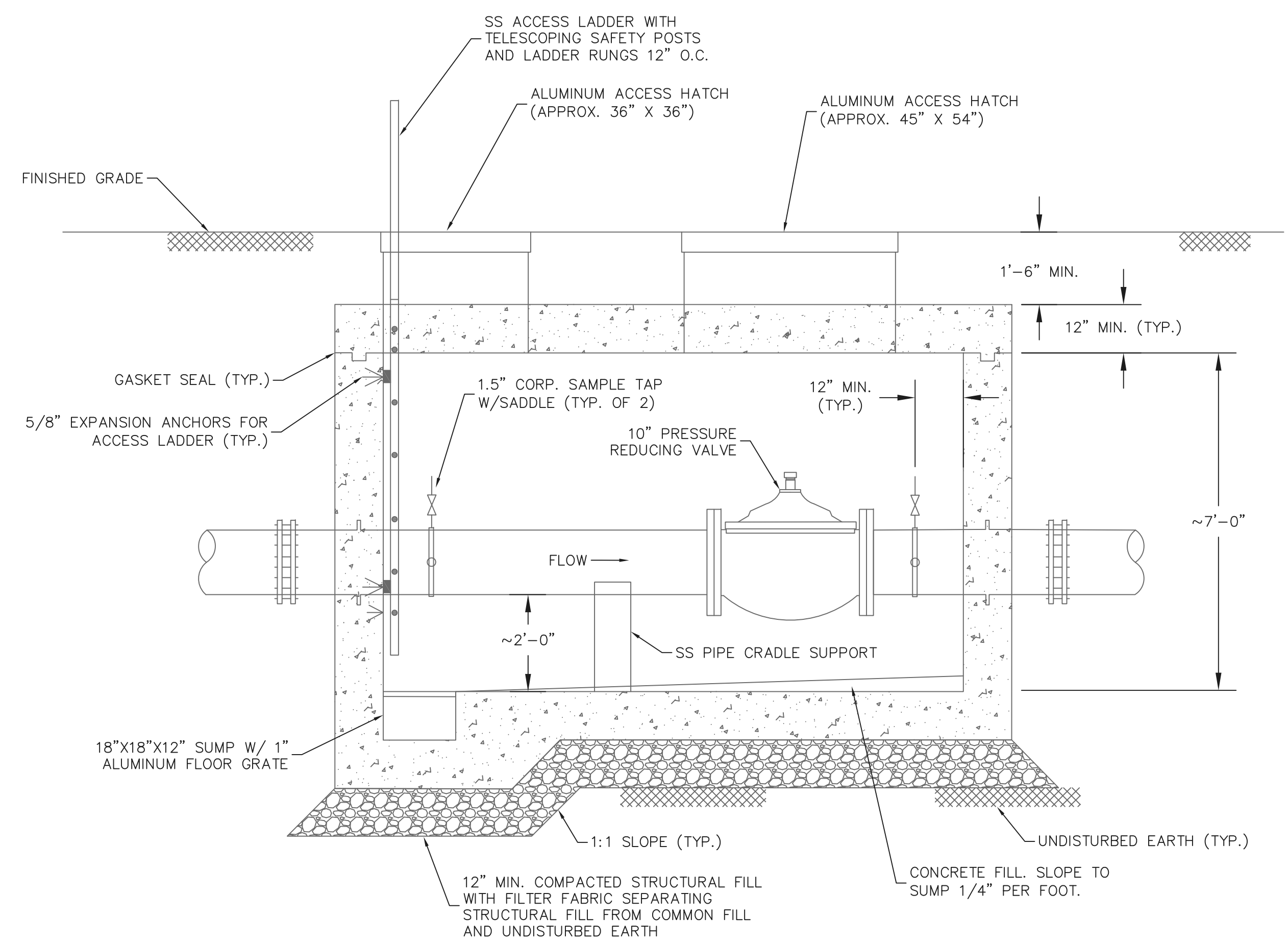
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| Project: | BID #22-38 | Sheet: | 9 of 11 |
| Drawn By: | WCC | | |
| Scale: | 1" = 20' | | |
| Date: | AUGUST 2022 | | |



PLAN 10A - HUTCHINSON ROAD PRV
SCALE: 1"=10'



PRV DETAIL - PLAN VIEW
SCALE: N.T.S.



PRV DETAIL - PROFILE VIEW
SCALE: N.T.S.

NOTES

1. Furnishing and installing new PRV shall be paid as a lump sum under the appropriate bid item and shall include all equipment and appurtenances shown in the Plan and Profile Details on this sheet, as well as all items listed in the contract specifications whether shown on the drawings or not. Unless otherwise noted on Plan 10A, all other site work shall be paid under the applicable site work Bid Items (i.e. 10" CLDI, 10" Gate Valves, etc.).
2. Depth of excavation for the PRV vault installation is expected to be 12'-ft or greater. Design and installation of trench shoring shall be incidental to the PRV installation.
3. Trench limits for installation of the new PRV and associated CLDI water main pipe shall include all area between the connections to the existing CI water main pipe on both sides of the proposed work.
4. It is anticipated that trench rock will be encountered in the excavation area. Removal and disposal of trench rock shall be paid under the applicable bid item for trench rock and will not be considered incidental to the installation of the new PRV.
5. Control density fill shall be utilized during backfill operations to ensure there are no voids around the new PRV during backfill operations.
6. Segments of existing water main and drain on Hutchinson Road are located within the same trench.
7. Bury depth of water main is expected to be approximately six (6) feet.
8. There is no sidewalk on Hutchinson Road. Edge of roadway is defined by asphalt berm and grassed area. Asphalt berm and landscaped areas disturbed on Hutchinson Road shall be replaced/restored in kind.
9. Bypass water service is anticipated for two buildings during the completion of this work.

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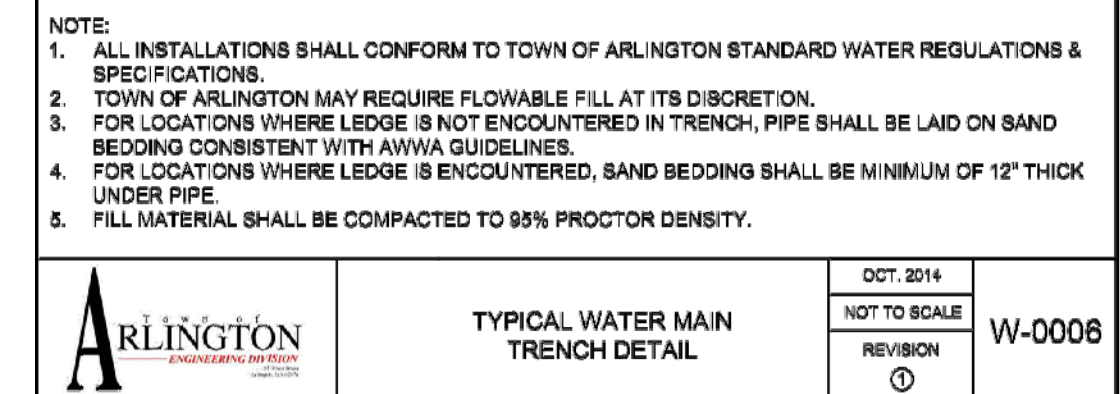
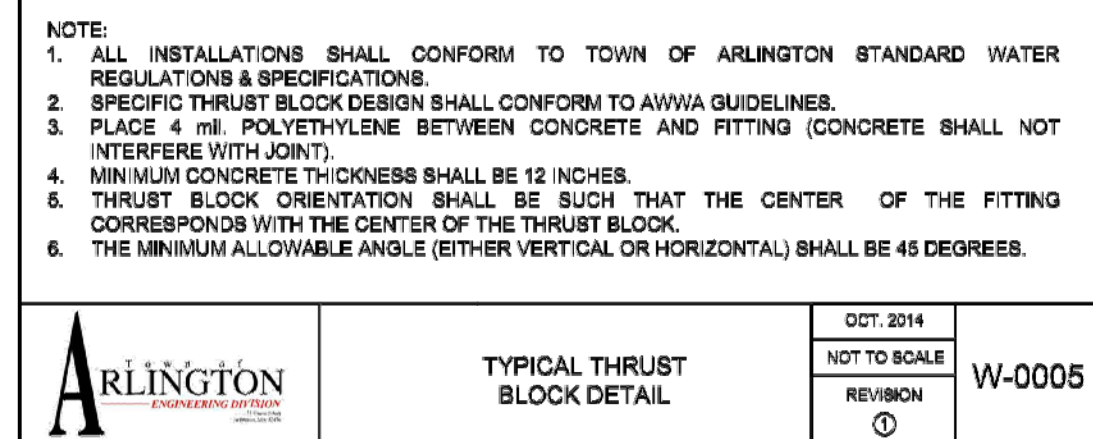
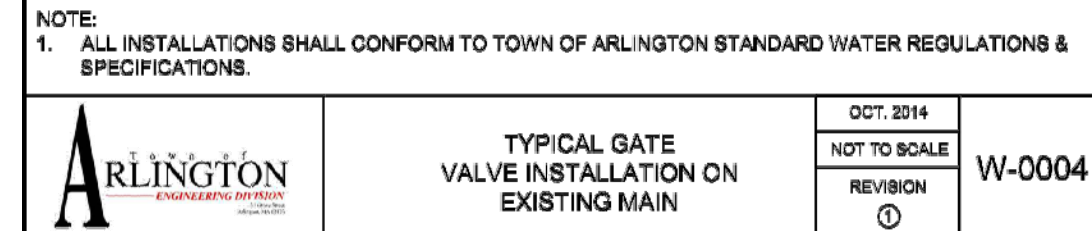
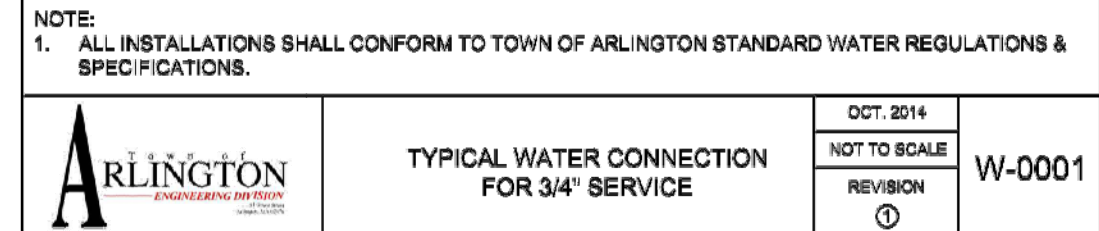
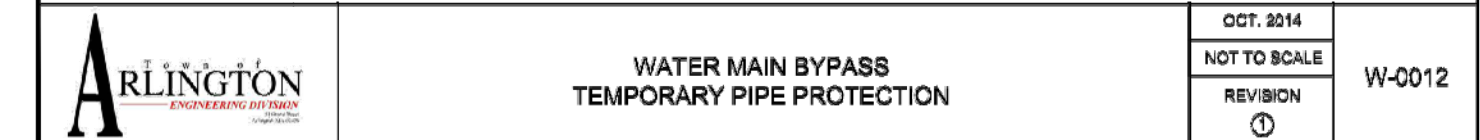
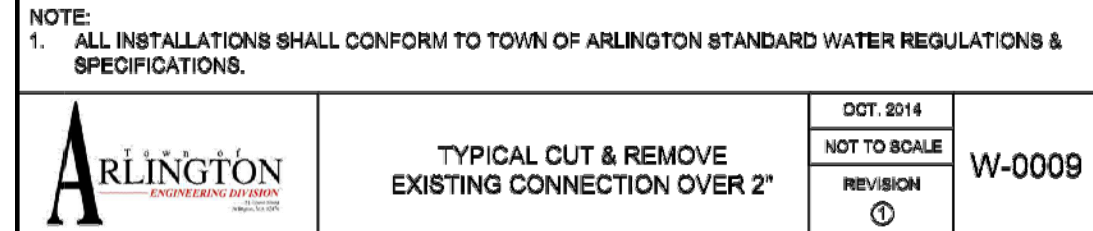
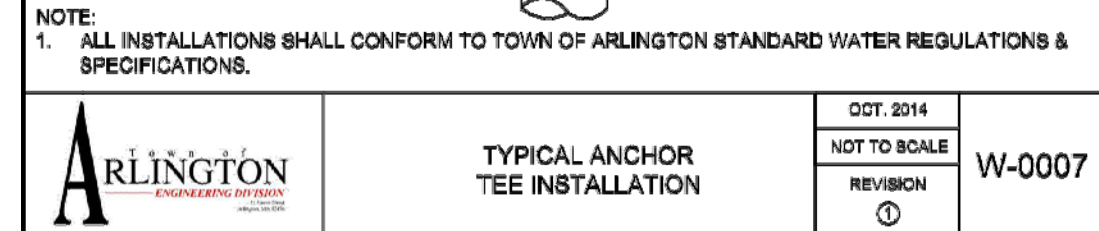
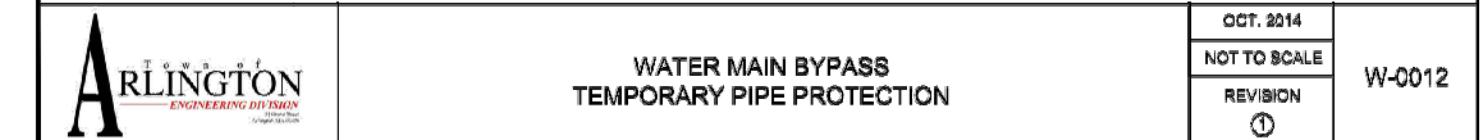
Town of
ARLINGTON
Engineering Division
51 Grove Street
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**2021/2022 WATER
DISTRIBUTION SYSTEM
IMPROVEMENTS**

**HUTCHINSON ROAD PRV
(BID ALTERNATE #2)**

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|-----------|-------------|--------|----------|
| Project: | BID #22-38 | Sheet: | 10 of 11 |
| Drawn By: | WCC | | |
| Scale: | AS NOTED | | |
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1. PLANS WERE DEVELOPED USING AVAILABLE AERIAL IMAGERY, EXISTING PLANS, AND ON-SITE OBSERVATIONS. A SURVEY OF THE PROJECT AREA WAS NOT CONDUCTED. THE LOCATIONS OF THE FEATURES SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATIONS OF ANY EXISTING UTILITIES AND/OR FEATURES NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE TOWN OF ARLINGTON ENGINEERING DIVISION AND/OR THE WATER AND SEWER DIVISION OF ALL DISCREPANCIES IDENTIFIED IN THE FIELD.
2. ALL ON-SITE DRAINAGE CATCH BASINS SHALL BE EQUIPPED WITH AN INLET PROTECTION DEVICE DURING ALL CONSTRUCTION ACTIVITIES. ANY SEDIMENT THAT ENTERS THE TOWN'S STORMWATER SYSTEM AS A RESULT OF THIS WORK SHALL BE REMOVED BY THE CONTRACTOR AT THEIR EXPENSE.
3. STREETS SHALL BE SWEEPED AND CLEANED OF SEDIMENT AND DEBRIS AT THE END OF EACH WORK DAY.
4. ANY AREA DISTURBED BY THE CONTRACTOR OUTSIDE THE LIMITS OF WORK SHALL BE RESTORED TO ORIGINAL CONDITION AT NOT COST TO THE OWNER.
5. THE CONTRACTOR MUST NOTIFY ALL UTILITIES PRIOR TO PERFORMING ANY EXCAVATION WORK. THE TOWN OF ARLINGTON IS NOT A MEMBER OF "DIG-SAFE" AND MUST BE NOTIFIED DIRECTLY AT LEAST 72-HOURS PRIOR TO ANY EXCAVATION AT 781-316-3310 OR 781-316-3301.
6. THE LOCATION AND NUMBER OF PROPOSED FITTINGS SHOWN ON THESE PLANS ARE INTENDED FOR ILLUSTRATIVE PURPOSES ONLY. FIELD CONDITIONS WILL DICTATE THE LOCATION, NUMBER, AND TYPE OF FITTINGS REQUIRED. ALL INSTALLATION SHALL BE TO THE FULL SATISFACTION OF THE TOWN OF ARLINGTON.
7. THE CONTRACTOR SHALL ANTICIPATE THAT TRENCH ROCK/LEDGE WILL BE PRESENT BELOW AND TO THE SIDES OF THE EXISTING WATER MAIN TRENCHES. ADDITIONAL TRENCH ROCK/LEDGE SHALL BE REMOVED TO THE EXTENTS APPROVED BY THE ENGINEERING DIVISION TO PROVIDE PROPER BURY DEPTH OF THE PROPOSED CLDI WATER MAIN. CARE SHALL BE TAKEN NOT TO DISRUPT NEARBY UTILITIES DURING THE REMOVAL OF TRENCH ROCK/LEDGE.
8. THE CONTRACTOR SHALL ASSUME THAT THE EXISTING WATER, SEWER, AND NATURAL GAS HOUSE SERVICES ARE LOCATED WITHIN THE SAME TRENCH. THE CONTRACTOR SHALL ASSUME THAT ALL SEWER SERVICE LATERALS ARE 4-6" CLAY PIPE UNLESS OTHERWISE NOTED ON THE PLANS.
9. THE LOCATION OF THE PROPOSED WATER SERVICE LATERALS ARE NOT SHOWN ON THESE PLANS. THE LOCATION OF THE NEW 1" COPPER SERVICE LATERALS SHALL BE FIELD DETERMINED AND LAID OUT TO THE SATISFACTION AND APPROVAL OF THE TOWN OF ARLINGTON.
10. TRENCHES SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN LAYERS NOT OVER 6" DEEP USING MECHANICAL COMPACTORS OR JET-RODDING. BACKFILL MATERIALS SHALL BE COMPACTED TO A 95% MAXIMUM DRY DENSITY AS DETERMINED BY AASHTO STANDARD TEST T99 METHOD C.



NOTES

| NOTES | | |
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| No. | Revision/Issue | Date |
| <p>Town of</p> <h1 style="margin: 0;">ARLINGTON</h1> <p><i>Engineering Division</i></p> <p>51 Grove Street Arlington, MA 02476</p> | | |
| <p>2021/2022 WATER DISTRIBUTION SYSTEM IMPROVEMENTS</p> | | |
| <p>GENERAL NOTES AND STANDARD CONSTRUCTION DETAILS</p> | | |
| Project: BID #22-38 Drawn By: WCC Scale: N.T.S. Date: AUGUST 2022 | Sheet: <div style="font-size: 48px; font-weight: bold; margin-top: 10px;">11 of 11</div> | |